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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/152,008      | 09/11/1998  | SIG H. BADT JR.      | ALCA1100-6          | 8622             |

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[REDACTED] EXAMINER

HARPER, KEVIN C

| ART UNIT | PAPER NUMBER |
|----------|--------------|
| 2664     |              |

DATE MAILED: 04/11/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

SAC

|                              |   |                                  |
|------------------------------|---|----------------------------------|
| <b>Office Action Summary</b> | Application No.                           | Applicant(s)                     |
|                              | 09/152,008<br>Examiner<br>Kevin C. Harper | BADT, SIG H.<br>Art Unit<br>2664 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 22 January 2002.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1, 6, 9 and 10 is/are rejected.
- 7) Claim(s) 2-5, 7 and 8 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 11 September 1998 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some \* c) None of:
1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                   | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                          | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>15</u> . | 6) <input type="checkbox"/> Other: _____                                    |

***Response to Arguments***

1. Applicant's arguments with respect to claims 1- 10 have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

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Claims 9-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Bengston et al. (US 6,337,846)

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2. Bengston discloses a DRA provisioned telecommunications network (abstract, Figure 1) having several nodes with working and spare links. A message (Figure 3) is transmitted between adjacent nodes in order to map the topology of the space capacity of the network (col. 5, lines 20-27). The message comprises a first field containing the identification number of the node that sends the message (item 44), a second field that contains the output port number (item 46), a third field that contains custodial node information (item 52), and a fourth field for identifying the message (item 40) while a DRA process is not in progress (col. 5, lines 11-13). The message is broadcast where there is a failed link (col. 5, lines 20-24).

***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shah et al. (US 5,646,936) in view of Rogers (US 6,061,735).

3. Regarding claim 1, Shah discloses a method of mapping a topology of spare capacity (Figure 5; col. 5, lines 66-67) of a DRA-based network. The method comprises the steps of outputting a message from one node to another concerning a spare link (Figure 8) and storing as a topology map the identities of all nodes and spare links interconnecting the nodes (Figures 2 and 5). However, Shah does not disclose identifying the port numbers. One skilled in the art would recognize that a cross-connect switch typically has port numbers identifying connections to different working paths and spare paths (col. 5, lines 18-22). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to identify the spare capacity by port number in the invention of Shah as a matter of design choice. Further, Shah does not disclose

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storing the network spare data in one location. Rogers discloses a network restoration system which stores spare link capacity data in a central location. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to store spare link capacity data in a central location in the invention of Shah as evidenced by Rogers in order to provide a centralized location for supervising and/or monitoring network restoration events.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shah et al. (US 5,646,936) in view of Sharma et al. (US 5,986, 783).

4. Regarding claim 6, Shah discloses mapping a spare capacity topology (Figure 5; col. 5, lines 66-67) for network with working paths and spare paths. Request messages (Figure 8) are transmitted between various nodes. However, Shah does not disclose monitoring the spare paths. Sharma discloses monitoring a link to ensure it is still operational by intermittently transmitting keep-alive messages on the link (col. 15, lines 62-64). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to verify the operability of a spare path in the invention of Shah as evidenced by Sharma. Further, Shah in view of Sharma does not disclose identifying the spare paths by port number. One skilled in the art would recognize that a cross-connect switch typically has port numbers identifying connections to different working paths and spare paths (col. 5, lines 18-22). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to identify the spare capacity by port number in the invention of Shah in view of Sharma as a matter of design choice. Still further, Shah in view of Sharma does not disclose determining the number of spare links available. One skilled in the art would recognize that determining the amount of spare capacity in a network is desirable to ensure adequate spare capacity exists within the network (Shah, col. 6, lines 1-4). Therefore, it would have been obvious

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to one skilled in the art at the time the invention was made to determine the number of spare links in the invention of Shah in view of Sharma.

***Allowable Subject Matter***

5. Claims 2-5 and 7-8 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Harper whose telephone number is 703-305-0139. The examiner can normally be reached weekdays, except Wednesday, from 8:00 AM to 6:30 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin, can be reached at 703-305-4366. The fax number for Technology Center (TC) 2600 is 703-872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Customer Service Office for TC 2600 at 703-306-0377.

KWANG BIN YAO  
PRIMARY EXAMINER

Kevin C. Harper



April 8, 2002

